

Appl. No. : 10/710,913 Confirmation No.: 4912
Applicant: Paul McMahan
Filed: August 12, 2004
Title: Method and System for Managing Interrupts
in an Instant Messaging Application
TC/A.U. : 2443
Examiner: Fearer, Mark D.
Docket No. : RSW920040102US1-11
Customer No. : 44,870

Mail Stop: AF
Commissioner for Patents
PO Box 1450
Alexandria, VA 22313-1450

APPEAL BRIEF IN COMPLIANCE WITH 37 CFR 41.37

In response to the Office Action dated as mailed October 30, 2009 this appeal brief is being submitted. The Notice of Appeal was acknowledged as being received on January 22, 2010.

I. Real Party in Interest

The real party in interest is International Business Machines (IBM) Corporation, assignee of record.

II. Related Appeals and Interferences

There are no other appeals or interferences, known to the Appellants, or Appellants' legal representatives, which will directly affect or be directly affected by or have a bearing on the Board's decision in this pending appeal.

III. Status of Claims

A. Status of All Claims

1. Claims cancelled: 3, 4, 17-19, 22-39,
2. Claims withdrawn from consideration but not cancelled: None
3. Claims objected to: 41-42, 45, 48-49, 53 and 55
4. Claims allowed or confirmed: None
5. Claims rejected: 1, 2, 5-16, 20-21, 40, 43-44, 46-47, 50-52, 54 and 56

B. Claims on Appeal

The claims on appeal are: 1, 2, 5-16, 20-21, 40, 43-44, 46-47, 50-52, 54 and 56.

IV. Status of Amendments

There were no amendments filed after the Office Action of September 4, 2009. Applicant chose to proceed directly with this appeal. All previous papers filed by Applicant have been entered.

V. Summary of Claimed Subject Matter

The present invention relates to a computer implemented method, system and computer program product or computer readable storage medium for managing interrupts in an instant messaging application. When an instant messaging interrupt request is received from an interrupting contact during an ongoing instant messaging conversation between two or more participants, a determination is made of at least one of: (1) whether the interrupting contact has an interrupt priority ranking in a contacts list of the communications device receiving the interrupt request that is higher than, or at least as high as, an interrupt priority ranking of each of the participants or contacts participating in the ongoing instant messaging conversation, or (2) whether an interrupting conversation has a higher priority compared to a priority of the ongoing

instant messaging conversation. The interrupt priority ranking of the ongoing instant messaging conversation is set by at least one of the participants or contacts participating in the ongoing instant messaging conversation in their communications device. The ongoing instant messaging conversation is interrupted in response to a predetermined or selected one of: (1) the interrupt priority ranking of the interrupting contact being higher than, or at least as high as, the interrupt priority ranking of each of the participants or contacts participating in the ongoing instant messaging conversation, or (2) the interrupting conversation having a higher interrupt priority ranking compared to the interrupt priority ranking of the ongoing instant messaging conversation.

Claims 1, 16, 40, 47 and 52 are independent claims. Claim 1 is a computer implemented method claim for managing interrupts in an instant messaging application. These features of claim 1 are represented by reference numeral 100 in Figure 1 for one embodiment of the present invention and reference numeral 400 in Figure 4 for another embodiment of the invention. The features of claim 1 are described in paragraphs [0015]-[0026] with reference to Figure 1 and paragraphs [0026]-[0029] with reference to Figure 4.

The first paragraph, element of feature of claim 1 is directed to receiving an interrupt request from an interrupting contact during an ongoing instant messaging conversation between at least two contacts each using a communications device, wherein the interrupt request is received by the communications device of at least one of the at least two contacts. This feature of claim 1 is represented by reference numeral 106 in Figure 1 and is described in paragraph [0017] of the specification and is also represented by reference numeral 408 in Figure 4 and is described in paragraph [0027].

The second paragraph, element or feature of claim 1 involves determining at least one of whether the interrupting contact has an interrupt priority ranking associated with the interrupting contact in a contacts list of the communications device receiving the interrupt request that is higher than, or at least as high as, an interrupt priority ranking of each of the at least two contacts participating in the ongoing instant messaging conversation (reference numeral 108 of Figure 1) and whether an interrupting conversation has a higher priority compared to a priority of the ongoing instant messaging conversation set by at least one of the at least two contacts participating in the ongoing instant messaging conversation in their communications device

(reference numeral 410 in Figure 4). These features are also described in paragraph [0018] with reference to block 108 in Figure 1 and paragraph [0028] with reference to block 410 in Figure 4.

The third paragraph, element or feature of claim 1 involves interrupting the ongoing instant messaging conversation in response to a predetermined one of the interrupt priority ranking of the interrupting contact being higher than, or at least as high as, the interrupt priority ranking of each of the at least two contacts participating in the ongoing instant messaging conversation (reference numeral 112 in Figure 1) and the interrupting conversation having a higher interrupt priority ranking compared to the interrupt priority ranking of the ongoing instant messaging conversation (reference numeral 416 in Figure 4). These features are also described in paragraph [0023] with reference to blocks 108-114 in Figure 1 and paragraph [0028] with reference to blocks 410 and 416 in Figure 4.

Claim 2 is a dependent computer implemented method claim depending directly from claim 1. Claim 2 recites selecting a precedence between interrupting the instant messaging conversation based on the interrupt priority ranking of the interrupting contact relative to the interrupt priority ranking of each of the at least two contacts and the interrupt priority ranking of the interrupting conversation relative to the interrupt priority ranking of the instant messaging conversation. This feature is described in paragraph [0030] of the specification with reference to Figures 1 and 4.

Claim 8 is a dependent computer implemented method claim depending directly from claim 1. Claim 8 recites sending an interrupt notification to any of the at least two contacts of the instant messaging conversation not contacted by the interrupting contact in response to interrupting the instant messaging conversation. This feature is represented in blocks 114 and 418 of Figures 1 and 4, respectively and is described in the specification in paragraphs [0023] and [0029].

Claim 9 is a dependent computer implemented method claim depending directly from claim 1. Claim 9 recites resuming the instant messaging conversation in response to the interrupting conversation being completed. This feature is represented by block 104 in Figure 1 and block 406 in Figure 4 and is described in the specification in paragraphs [0017] and [0027].

Claim 13 is a dependent computer implemented method claim depending directly from claim 1. Claim 13 recites assigning an interrupt priority ranking to all contacts in an instant

messaging contacts list in a user's communications device. These features are illustrated in Figure 3 which illustrates a contacts list 300, a contact name or identity 306 and interrupt priority ranking 308 for each contact. The features of claim 13 are also described in paragraph [0022] of the specification.

Claim 16 is an independent computer implemented method claim for managing interrupts in a instant messaging application. These features of claim 16 are represented by reference numeral 100 in Figure 1 for one embodiment of the present invention and reference numeral 400 in Figure 4 for another embodiment of the invention. The features of claim 16 are described in paragraphs [0026]-[0029] of the specification with reference to Figure 4.

The first paragraph, element or feature of claim 16 is directed to receiving an interrupt request from an interrupting contact during an ongoing instant messaging conversation between at least two contacts each using a communications device, wherein the interrupt request is received by the communications device of at least one of the at least two contacts. This feature is represented by reference numeral 408 in Figure 4 and is described in paragraph [0027] of the specification.

The second paragraph, element or feature of claim 16 is directed to interrupting the instant messaging conversation based on a set of interrupt rules and independent of a location of the communications device being used by each of the at least two contacts. This feature is represented by reference numerals 410-416 in Figure 4 and is described in paragraphs [0027]-[0028] of the specification.

Claim 16 goes on to recite that interrupting the instant messaging conversation based on the set of interrupt rules comprises: permitting the ongoing instant messaging conversation to be interrupted in response to interrupts being selectively permitted (reference numeral 404 of Figure 4 and paragraph [0026]); and determining that the interrupting conversation has an interrupt priority ranking higher than an interrupt priority ranking of the ongoing conversation set by at least one of the at least two contacts participating in the ongoing instant messaging conversation in their communications device [reference numeral 410 in Figure 4 and paragraph [0027]]; and sending an interrupt blocked message to the interrupting contact in response to interrupts being selectively blocked. This later feature is represented by reference numeral 532 in Figure 5 and is described in paragraph [0033] of the specification.

Claim 40 is an independent computer implemented method claim for managing interrupts in an instant messaging application. The features of claim 40 are represented by reference 100 in Figure 1 and described in the specification in paragraphs [0015]-[0026] with reference to Figure 1.

The first paragraph, element or feature of claim 40 involves receiving an interrupt request from an interrupting contact or user during an ongoing instant messaging conversation between at least two contacts or users each using a communications device, wherein the interrupt request is received by the communications device of at least one of the at least two contacts. This feature of claim 1 is represented by reference numeral 106 in Figure 1 and is described in paragraph [0017] of the specification.

The second paragraph, element or feature of claim 40 is directed to determining whether the interrupting contact or user has an interrupt priority ranking in a contacts list of the communications device receiving the interrupt request that is higher than, or at least as high as, a priority ranking of each of the at least two contacts or users in the contacts list participating in the ongoing instant messaging conversation set by at least one of the at least two contacts participating in the ongoing instant messaging conversation in their communications device. This feature is represented by reference numeral 108 in Figure 1 and is described in paragraph [0018] of the specification.

The third paragraph, element or feature of claim 40 involves interrupting the ongoing instant messaging conversation in response to the interrupt priority ranking of the interrupting contact or user being higher than, or at least as high as, each of the at least two contacts or users. This feature is represented by reference numeral 112 in Figure 1 and is described in paragraph [0023] of the specification.

Claim 47 is an independent system claim for managing interrupts in an instant messaging application. A system for managing interrupts is illustrated in Figure 6 and is described in paragraphs [0035]-[0043]. Paragraph [0037] provides that the elements of method 100 of Figure 1 and method 400 of Figure 4 may be embodied in the instant messaging program or applications 624 and 612 respectively in the server 602 and the contact communication devices 604 in Figure 6.

The first paragraph, element or feature of claim 47 is a communications device for receiving an interrupt from an interrupting contact during an instant messaging conversation between a contact using the communications device and at least one other contact using another communications device. This feature is illustrated by reference numeral 604 in Figure 6. The different features of the communication device 604 is described in paragraphs [0037]-[0041] of the specification.

The second paragraph, element of feature of claim 47 is a module stored in a memory of the communications device and operable on the communications device to determine at least one of whether the interrupting contact has an interrupt priority ranking associated with the interrupting contact in a contacts list of the communications device receiving the interrupt request that is higher than, or at least as high as, an interrupt priority ranking of each of the at least two contacts participating in the ongoing instant messaging conversation and whether an interrupting conversation has a higher priority compared to a priority ranking of the ongoing instant messaging conversation set by at least one of the at least two contacts participating in the ongoing instant messaging conversation. This feature corresponds to the set of interrupt rules 626 in Figure 6 which as described in paragraph [0038] control interrupts similar to methods 100 and 400 of Figures 1 and 4. Block 108 of Figure 1 and block 410 of Figure 4 as described in paragraphs [0018] and [0028] perform similar functions to those recited in claim 47 above.

The third paragraph, element or feature of claim 47 is another module stored in the memory of the communications device and operable on the communications device to interrupt the ongoing instant messaging conversation in response to a predetermined one of the interrupt priority ranking of the interrupting contact being higher than, or at least as high as, the interrupt priority ranking of each of the at least two contacts participating in the ongoing instant messaging conversation and the interrupting conversation having a higher interrupt priority ranking compared to the interrupt priority ranking of the ongoing instant messaging conversation. Again, paragraph [0038] provides that the set of interrupt rules control interrupts similar to that described with respect to methods 100 and 400 of Figures 1 and 4. Block 112 in Figure 1 and block 416 in Figure 4 as described in paragraphs [0012] and [0028] describe substantially the same operation as this feature of claim 47.

Claim 52 is an independent computer readable storage medium claim for managing interrupts in an instant messaging application. Paragraph [0043] provides that the elements of the invention may take the form of a computer program product on a computer-readable or computer-readable storage medium having computer-readable or computer-readable program code embodied in a medium for use by or in connection with a system such as system 600 of Figure 6. Paragraph [0043] goes on to provide that examples of such a medium may be illustrated in Figure 6 as I/O devices 630 and 636 or medium 632 and 638.

The first paragraph, element or feature of claim 52 provides computer usable program code configured to receive an interrupt request from an interrupting contact or user during an ongoing instant messaging conversation between at least two contacts or users. This feature of claim 52 is represented by reference numeral 106 in Figure 1 and is described in paragraph [0017] of the specification and is also represented by reference numeral 408 in Figure 4 and is described in paragraph [0027].

The second paragraph, element or feature of claim 52 provides computer usable program code configured to determine at least one of whether the interrupting contact has an interrupt priority ranking associated with the interrupting contact in a contacts list of the communications device receiving the interrupt request that is higher than, or at least as high as, an interrupt priority ranking of each of the at least two contacts participating in the ongoing instant messaging conversation (reference numeral 108 in Figure 1) and whether an interrupting conversation has a higher priority compared to a priority of the ongoing instant messaging conversation set by at least one of the at least two contacts participating in the ongoing instant messaging conversation (reference numeral 410 in Figure 4). These features are also described in paragraph [0018] with reference to block 108 in Figure 1 and paragraph [0028] with reference to block 410 in Figure 4.

The third paragraph, element or feature of claim 52 provides computer usable program code configured to interrupt the ongoing instant messaging conversation in response to a predetermined one of the interrupt priority ranking of the interrupting contact being higher than, or at least as high as, the interrupt priority ranking of each of the at least two contacts participating in the ongoing instant messaging conversation (reference numeral 112 in Figure 1) and the interrupting conversation having a higher interrupt priority ranking compared to the interrupt priority ranking of the ongoing instant messaging conversation (reference numeral 416

in Figure 4). These features are also described in paragraph [0023] with reference to blocks 108-114 in Figure 1 and paragraph [0028] with reference to blocks 410 and 416 in Figure 4.

VI. Grounds of Rejection to be Reviewed on Appeal

Whether claims 1, 5, 10, 16, 40, 43-44, 46-47 and 51-52 are unpatentable under 35 USC §103 (a) as being obvious over Brandenburg et al. (U.S. Pat. Pub. No. 2003/0063072) in view of Erb et al. (U.S. Pat. Pub. No. 2004/0142703), in further view of Brown et al. (U.S. Pat. Pub. No. 2003/0055908) and in further view of Horvitz et al. (U.S. Pat. Pub. No. 2005/0132014).

Whether claim 2 is unpatentable under 35 USC §103 (a) as being obvious over Brandenburg in view of Erb, in further view of Brown, in further view of Horvitz and in further view of Kirkland et al. (U.S. Pat. Pub. No. 2005/0149622).

Whether claims 6-7 and 20 are unpatentable under 35 USC §103 (a) as being obvious over Brandenburg in view of Erb, in further view of Brown, in further view of Horvitz and in further view of Brewer et al. (U.S. Patent No. 5,611,040).

Whether claims 8 and 21 are unpatentable under 35 USC §103 (a) as being obvious over Brandenburg in view of Erb, in further view of Brown, in further view of Horvitz and in further view of Asokan et al. (U.S. Pat. Pub. No. 2005/0220079).

Whether claim 9 is unpatentable under 35 USC §103 (a) as being obvious over Brandenburg in view of Erb, in further view of Brown, in further view of Horvitz and in further view of Balasuriya et al. (U.S. Pat. Pub. No. 2005/0245240).

Whether claims 11 and 12 are unpatentable under 35 USC §103 (a) as being obvious over Brandenburg in view of Erb, in further view of Brown, in further view of Horvitz and in further view of Horvitz et al. (U.S. Pat. Pub. No. 2005/084082; hereinafter Horvitz II).

Whether claims 13-14 and 50 are unpatentable under 35 USC §103 (a) as being obvious over Brandenburg in view of Erb, in further view of Brown, in further view of Horvitz and in further view of Savage et al. (U.S. Pat. Pub. No. 2001/0009014).

Whether claim 15 is unpatentable under 35 USC §103 (a) as being obvious over Brandenburg in view of Erb, in further view of Brown, in further view of Horvitz and in further view of Suorsa et al. (U.S. Pat. Pub. No. 2002/0156831).

VII. Arguments

Rejection under 35 U.S.C. §103(a) as being obvious over Brandenburg, Erb, Brown and Horvitz

Claims 1, 5, 10, 16, 40, 43-44, 46-47 and 51-52

Applicant respectfully submits that this rejection under 35 U.S.C. §103 does not follow the MPEP §706.02(j) which states:

“To support the conclusion that the claimed invention is directed to obvious subject matter, either the references must expressly or impliedly suggest the claimed invention or the examiner must present a convincing line of reasoning as to why the artisan would have found the claimed invention to have been obvious in light of the teachings of the references.” *Ex parte Clapp*, 227 USPQ 972, 973 (Bd. Pat. App. & Inter. 1985).

As discussed below, Applicant respectfully submits that Brandenberg Erb, Brown and Horvitz, whether considered individually or combined, fail to teach or suggest the essential elements needed for a *prima facia* rejection under §103.

Turning initially to the rejection of claim 1 under 35 USC §103(a) as being unpatentable over Brandenberg in view of Erb, in further view of Brown and in further view of Horvitz, claim 1 recites:

“determining at least one of whether the interrupting contact has an interrupt priority ranking associated with the interrupting contact in a contacts list of the communications device receiving the interrupt request that is higher than, or at least as high as, an interrupt priority ranking of each of the at least two contacts participating in the ongoing instant messaging conversation and whether an interrupting conversation has a higher priority compared to a priority of the ongoing instant messaging conversation set by at least one of the at least two

contacts participating in the ongoing instant messaging conversation in their communications device...”

The Office Action on page 6 admits that Brandenberg fails to teach these features of the embodiment as recited in claim 1. Paragraph [0026] of Erb was cited for teaching the deficiencies of Brandenberg. Applicant respectfully submits that Erb also fails to teach the features of the embodiment of the present invention as recited in amended claim 1. Paragraph [0026] of Erb recites:

“[0026] The present invention relates to a system and method of controlling the delivery of an incoming call directed to a wireless communications device. When an incoming call directed to a wireless communications device is received, the location of the wireless communication device to which an incoming call is destined is determined. If the wireless communication device is not within a designated zone the incoming call is directed to the wireless communication device. If the wireless communication device is in a designated zone, the incoming call is handled based on specified criteria. In this manner, important meetings are not interrupted by incoming calls to wireless communications device unless the incoming calls take priority over the meetings...” (*emphasis added*)

Additionally, Erb in paragraph [0031] recites:

“[0031] The telephone system 20 is also programmed with the direction zones within one or both of the floors. The redirecting zones corresponding with designated areas or zones on the floor such as, for example, meeting and/or conference rooms where it is desired to control delivery of incoming calls to wireless communication devices carried by individuals in the designated areas...”

Accordingly, Erb determines whether to direct incoming calls to a wireless communications device based on a location of the device in a building (*emphasis added*). For example, if the communications device is in a designated zone or location, a meeting room for instance, the call is redirected so as to not interrupt the meeting unless the call takes priority over the meeting. Applicant respectfully submits that Erb does not teach or suggest determining whether the interrupting contact has an interrupt priority ranking associated with the interrupting contact in a contacts list of the communications device receiving the interrupt request that is higher than, or at

least as high as, an interrupt priority ranking of each of the at least two contacts participating in the ongoing instant messaging conversation, as provided by claim 1 (*emphasis added*).

Brown discloses a method, system and program for controlling and specifying throughput of message requests in a messaging system. Paragraphs [0042] and [0043] of Brown were cited in the Office Action dated 09/30/2009 in rejecting claim 1. Paragraph [0042] and [0043] of Brown recite:

[0042] A method, system and program for controlling and specifying throughput of message requests in a messaging system are provided. A "messaging session" preferably includes, but is not limited to, any combination of voice, graphical, video, and/or text messages, instant and/or delayed, transmitted between multiple users via a network. Messaging sessions may include use of chat rooms, instant messages, e-mail, IRC, conference calling and other network methods of providing a channel for users to communicate within. Further, messaging sessions may include communications such as voice, video, and text transmissions between multiple telephony devices.

[0043] A "message request" may include, but is not limited to, a request for a user to join a chat session, a request for a user to participate in an instant messaging session, a request for a user to join a telephone conversation, and other requests for user to participate in a messaging session. In particular, a message request may be transmitted to a receiving user according to the receiving user's user identification (ID), screen name, telephone number, e-mail address, network location, or other identifier by which a message request may be routed to the intended receiving user.

Applicant respectfully submits that Brown also does not teach or suggest the features of claim 1 recited above.

Horvitz discloses statistical models and methods to support the personalization of applications and services via consideration of preference encodings of a community of users. Paragraphs [0030] and [0031] of Horvitz were cited on pages 10 and 11 of the Office Action dated as mailed 09/30/2009. Paragraphs [0030] and [0031] of Horvitz recite:

[0030] Turning to FIG. 4, a communications prototype interface 400 is illustrated in accordance with an aspect of the present invention. As noted above, Bestcom systems employ best means communication methods based upon preferences of contactees and contactors. A Bestcom prototype is depicted as the interface 400 and has been used to explore formal use of expected utility as well as control via the specification of high-level cost-benefit rules. Considering cost-benefit rules control, the communications system and interface 400 considers context, including time of day and day of week, as well as the call priority (which can be interpreted as the cost of deferring a call) of individuals and groups of people. This interface 400 shows a group manager, showing people, grouped by

organization and activity, including such groups as meeting in one hour from now, people whom I called today, and so forth.

[0031] Proceeding to FIG. 5, a diagram 500 depicts how prioritized calls or messages are routed to a receiver of the messages over time and in view of the cost of interruption of the prioritized messages. The high-level cost-benefit version of the communications system allows calls to be routed through to users, even when they are in a mobile setting, but considering the current, dynamically changing cost of interruption, based on meetings, sensed observations (such as a microphone and conversation analysis system picking up conversation), and desktop activities (e.g., what is the user doing now), and settings, such as what is the user's Instant Messenger status set up to report (busy, away, etc.).

Accordingly, Applicant respectfully submits that none of the cited documents teach or suggest the features of claim 1, namely, determining whether the interrupting contact has an interrupt priority ranking associated with the interrupting contact in a contacts list of the communications device receiving the interrupt request that is higher than, or at least as high as, an interrupt priority ranking of each of the at least two contacts participating in the ongoing instant messaging conversation, as provided by claim 1 (*emphasis added*). Additionally, none of the documents of record teach or suggest determining whether an interrupting conversation has a higher priority compared to a priority of the ongoing instant messaging conversation set by at least one of the at least two contacts participating in the ongoing instant messaging conversation in their communications device, as provided by the embodiment of the present invention as recited in claim 1 (*emphasis added*).

For all of these reasons discussed above, Applicant respectfully submits that claim 1 is patentably distinguishable over Brandenberg, Erb, Brown and Horvitz, whether considered individually or combined, and reconsideration and withdrawal of the §103 rejection of claim 1 is respectfully requested.

With regard to the rejection of claims 5 and 10 under 35 U.S.C. §103(a) as being obvious over Brandenberg in view of Erb, in further view of Brown and in further view of Horvitz, these claims recite additional features which further patentably distinguish over Brandenberg, Erb, Brown, and Horvitz. Additionally, claims 5 and 10 depend directly from independent claim 1, and by virtue of that dependency, include all of the features of independent claim 1. Therefore, claims 5 and 10 are also respectfully submitted to be patentably distinguishable over

Brandenberg, Erb, Brown and Horvitz for the same reasons as discussed with respect to claim 1. Reconsideration and withdrawal of the §103 rejection of claims 5 and 10 is respectfully solicited.

Turning now to the rejection of independent claims 16, 40, 47 and 52 under 35 U.S.C. §103(a) as being obvious over Brandenberg in view of Erb further in view of Brown and further in view of Horvitz, claims 16, 40, 47 and 52 recite similar features to independent claim 1. Therefore, claims 16, 40, 47 and 52 are respectfully submitted to be patentably distinguishable over Brandenberg, Erb, Brown and Horvitz for the same reasons as discussed with respect to claim 1. Reconsideration and withdrawal of the §103 rejection of independent claims 16, 40, 47 and 52 is respectfully requested.

Regarding the rejection of claim 43, 44, 46 and 51 under 35 U.S.C. §103(a) as being obvious over Brandenberg in view of Erb in further view of Brown and in further view of Horvitz, claim 43, 44 and 46 depend directly from independent claim 40. Claim 51 depends directly from independent claim 47. Because of these dependencies, claims 43, 44 and 46 include all of the features of independent claim 40 and claim 51 includes all of the features of independent claim 47. Therefore, claims 43, 44, 46 and 51 are submitted to be patentably distinguishable over Brandenberg, Erb, Brown and Horvitz for the same reasons as claims 40 and 47. Reconsideration and withdrawal of the §103 rejection of claim 43, 44, 46 and 51 is respectfully requested.

**Rejection under 35 U.S.C. §103(a) as being obvious over Brandenburg, Erb, Brown
Horvitz and Kirkland**

Claim 2

Claim 2 recites:

“selecting a precedence between interrupting the instant messaging conversation based on the interrupt priority ranking of the interrupting contact relative to the interrupt priority ranking of each of the at least two contacts and the interrupt priority ranking of the interrupting conversation relative to the interrupt priority ranking of the instant messaging conversation.”

Applicant respectfully submits that there is no teaching or suggestion in Brandenberg, Erb, Brown, Horvitz or Kirkland of the features of claim 2. The Office Action on page 15 admits that Brandenberg, Erb and Brown fail to teach the features of claim 2. Paragraph [0052] of Kirkland was cited for this deficiency. Applicant respectfully submits that paragraph [0052] of Kirkland merely teaches delaying the delivery of messages having a priority level below a certain threshold and to maintain a database of delayed messages, or alternately to append the delayed messages to their appropriate queues. Applicant respectfully submits that Kirkland also does not teach or suggest selecting between the two criteria of interrupting an instant messaging conversation as provided by the embodiment of the present invention in claim 2.

Additionally, claim 2 depends directly from independent claim 1. Because of this dependency, claim 2 includes all of the features of independent claim 1. Applicant respectfully submits that Kirkland adds nothing to the teachings of Brandenberg, Erb, Brown and Horvitz so as to render independent claim 1 unpatentable. Therefore, for all of the reasons discussed, claim 2 is respectfully submitted to be patentably distinguishable over Brandenberg, Erb, Brown, Horvitz and Kirkland, whether considered individually or combined, and reconsideration and withdrawal of the §103 rejection of claim 2 is respectfully requested.

Rejection under 35 U.S.C. §103(a) as being obvious over Brandenburg, Erb, Brown

Horvitz and Brewer

Claims 6-7 and 20

Claims 6 and 7 depend directly from independent claim 1 and claim 20 depends directly from independent claim 16. Because of these dependencies, claims 6 and 7 include all of the features of independent claim 1, claim 20 includes all of the features of independent claim 16. Brewer was cited for disclosing a system and method for activating double-click applications with a single click comprising placing a window in the foreground and taking control of the mouse and keyboard (column 1, lines 56-62 of Brewer). Applicant respectfully submits that Brewer adds nothing to the teachings of Brandenberg, Erb, Brown and Horvitz so as to render

independent claims 1 and 16 unpatentable. Therefore, claims 6, 7 and 20 are respectfully submitted to be patentably distinguishable over these asserted documents, and reconsideration and withdrawal of the 35 U.S.C. §103 rejection of claims 6, 7 and 20 is respectfully solicited.

Rejection under 35 U.S.C. §103(a) as being obvious over Brandenburg, Erb, Brown

Horvitz and Asokan

Claims 8 and 21

Claim 8 recites:

“sending an interrupt notification to any of the at least two contacts of the instant messaging conversation not contacted by the interrupting contact in response to interrupting the instant messaging conversation.”

Claim 21 recites similar features. The Office Action on page 19 admits that Brandenberg, Erb and Horvitz fail to disclose the features of claims 8 and 21 as recited above. Asokan was cited as teaching the deficiencies of Brandenberg Erb and Horvitz with reference to paragraph [0038] of Asokan. Applicant respectfully disagrees that Asokan teaches the features of claims 8 and 21 as recited above. Paragraph [0038] of Asokan recites:

“[0038] In some embodiments of the present invention, the packet-switched session may be a push-to-talk session that has been initiated by a user of the GSM/GPRS wireless terminal and that was established by a push-to-talk server. In response to receiving a circuit-switched page, the wireless terminal via, for example, a push-to-talk application that is running on the terminal, notifies the push-to-talk server that the push-to-talk session is to be temporarily suspended. This notification may be forwarded, for example, as either a text message or an e-mail message that is transmitted over SMS data bearer. The message may include, for example, an identifier associated with the cellular telephone (e.g., a push-to-talk client ID), identification of the reason the push-to-talk session is being suspended, the expected interval of the suspension, etc. If other participants in the push-to-talk session attempt to communicate with the wireless terminal over the push-to-talk session during the period when the wireless terminal has suspended the session, the push-to-talk server may notify those participants that the wireless terminal is temporarily unavailable...”

Accordingly, Asokan teaches sending a message that a push-to-talk session is temporarily suspended or unavailable. Applicant respectfully submits that sending an interrupt notification to any of the at least two contacts of an instant messaging conversation not contacted by the interrupting contact in response to interrupting the instant messaging conversation is patentably distinguishable from the notification that a push-to-talk session is temporarily suspended or unavailable as taught by Asokan. Additionally, claim 8 depends directly from independent claim 1 and claim 21 depends directly from independent claim 16. Applicant respectfully submits that Asokan adds nothing to the teachings of Brandenberg, Erb, Brown and Horvitz so as to render independent claims 1 and 16 unpatentable as previously discussed. For all of these reasons, dependent claims 8 and 21 are respectfully submitted to be patentably distinguishable over the documents of record, and reconsideration and withdrawal of the Section 103 rejection of claims 8 and 21 is respectfully requested.

Rejection under 35 U.S.C. §103(a) as being obvious over Brandenburg, Erb, Brown

Horvitz and Balasuriya

Claim 9

Claim 9 recites “resuming the instant messaging conversation in response to the interrupting conversation being completed.” The Office Action on page 21 admits that Brandenberg, Erb, Brown and Horvitz fail to disclose the features of claim 9. Paragraph [0013] of Balasuriya was cited for teaching this deficiency. Paragraph [0013] of Balasuriya recites:

“The disclosure provides an apparatus for and method of storing subsequent streaming media in a memory associated with a wireless communication device in response to receiving a communication request. For example, the disclosure provides for selectively storing at least one media of a multicast or unicast session in a local memory of a wireless communication device when a media streaming session is interrupted by an event, such as an incoming call. A user of the wireless communication device can resume playing the session from the local memory when interruption ends.”

Accordingly, Balasuriya teaches recording a streaming multicast or unicast session which can be played to the user after the interrupting event ends. Applicant respectfully submits that resuming an instant messaging conversation in response to the interrupting conversation being completed is patentably distinguishable from recording a streaming multicast or unicast session and then replaying the recorded session as taught by Balasuriya. Additionally, claim 9 depends directly from independent claim 1, and by virtue of that dependency, includes all of the features of independent claim 1. Applicant respectfully submits that Balasuriya adds nothing to the teachings of Brandenberg, Erb Brown and Horvitz so as to render independent claim 1 unpatentable as previously discussed. For all of these reasons, claim 9 is submitted to be patentably distinguishable over Brandenberg, Erb, Brown, Horvitz and Balasuriya, and reconsideration and withdrawal of the Section 103 rejection of claim 9 is respectfully solicited.

Rejection under 35 U.S.C. §103(a) as being obvious over Brandenburg, Erb, Brown

Horvitz and Horvitz II

Claims 11 and 12

Claim 11 depends directly from independent claim 1 and claim 12 depends directly from claim 11. Because of these dependencies, claims 11 and 12 include all of the features of independent claim 1. Applicant respectfully submits that Horvitz II adds nothing to the teachings of Brandenberg, Erb, Brown and Horvitz so as to render independent claim 1 unpatentable. Therefore, claims 11 and 12 are also submitted to be patentably distinguishable over Brandenberg, Erb, Brown, Horvitz and Horvitz II. Reconsideration and withdrawal of the 35 U.S.C. § 103 rejection of claims 11 and 12 is respectfully requested.

**Rejection under 35 U.S.C. §103(a) as being obvious over Brandenburg, Erb, Brown
Horvitz and Savage**

Claims 13-14 and 50

Claim 13 recites:

“assigning an interrupt priority ranking to all contacts in an instant messaging contacts list in a user’s communications device.”

And claim 14 recites:

“wherein assigning an interrupt priority ranking comprises one of assigning the interrupt priority ranking by placing all contacts in a predetermined order in the contact list or auxiliary contact list on the user’s communications device and by assigning a contact priority number to each contact in the contact list.”

The Office Action on page 25 admits that Brandenberg Erb and Horvitz fail to disclose a system or method for managing interruptions to network users where an interrupt ranking is assigned to all users or ranking is performed by a predetermined order. Savage was cited for disclosing facilitating real-time, multi-point communications over the internet wherein a scheduler keeps track of and maintains the priority of each participant in each conference citing paragraph [0102] of Savage. Applicant respectfully submits that neither Savage nor the other documents of record teach or suggest the features of claims 13 and 14 as recited above. Additionally, claim 13 depends directly from independent claim 1 and claim 14 depends from claim 13. Because of this dependency, claims 13 and 14 include all of the features of claim 1. Applicant respectfully submits that Savage adds nothing to the teachings of Brandenberg, Erb, Brown and Horvitz so as to render independent claim 1 unpatentable. Accordingly, claims 13 and 14 are respectfully submitted to be patentably distinguishable over the cited documents for the same reasons as claim 1.

Claim 50 depends directly from independent claim 47. As a result of this dependency, claim 50 includes all of the features of independent claim 47. Applicant respectfully submits that Savage adds nothing to the teachings of Brandenberg, Erb, Brown and Horvitz so as to render

independent claim 47 unpatentable. Accordingly, claim 50 is submitted to be patentably distinct over the documents of record for the same reasons as claim 47. Reconsideration and withdrawal of the Section 103 rejection of claim 50 is respectfully solicited.

Rejection under 35 U.S.C. §103(a) as being obvious over Brandenburg, Erb, Brown

Horvitz and Suorsa

Claim 15

Claim 15 depends directly from independent claim 1, and because of that dependency, includes all of the features of independent claim 1. Suorsa was cited for disclosing automated provisioning of computing networks using a network database data model wherein Lightweight Directory Access Protocol (LDAP) verifies the access level of an agent. Suorsa adds nothing to the teachings of Brandenberg, Erb, Brown and Horvitz or the other documents of record so as to render independent claim 1 unpatentable. Therefore, claim 15 is submitted to be patentably distinct over Brandenberg, Erb, Brown, Horvitz and Suorsa as well as the other documents of record, and reconsideration and withdrawal of the Section 103 rejection of claim 15 is respectfully requested.

Conclusion

For the reasons discussed above, Applicant respectfully submits that the rejections standing in this application are improper. The Examiner has failed to establish a *prima fascia* case of obviousness under 35 U.S.C. §103(a) with respect to claims 1, 2, 5-16, 20-21, 40, 43-44, 46-47, 50-52, 54 and 56. Therefore, Applicant respectfully submits these claims are in condition for allowance. Reversal of the rejection of these claims is respectfully requested.

Respectfully submitted,

Paul McMahan et al.
(Applicant)

Date: March 18, 2010

By: Charles L. Moore
Charles L. Moore
Registration No. 33,742
Moore & Van Allen PLLC
P.O. Box 13706
Research Triangle Park, N.C. 27709
Telephone: (919) 286-8000
Facsimile: (919) 286-8199

VIII. Claims Appendix

1. (Previously Presented) A computer implemented method for managing interrupts in an instant messaging application, comprising:

receiving an interrupt request from an interrupting contact during an ongoing instant messaging conversation between at least two contacts each using a communications device, wherein the interrupt request is received by the communications device of at least one of the at least two contacts;

determining at least one of whether the interrupting contact has an interrupt priority ranking associated with the interrupting contact in a contacts list of the communications device receiving the interrupt request that is higher than, or at least as high as, an interrupt priority ranking of each of the at least two contacts participating in the ongoing instant messaging conversation and whether an interrupting conversation has a higher priority compared to a priority of the ongoing instant messaging conversation set by at least one of the at least two contacts participating in the ongoing instant messaging conversation in their communications device; and

interrupting the ongoing instant messaging conversation in response to a predetermined one of the interrupt priority ranking of the interrupting contact being higher than, or at least as high as, the interrupt priority ranking of each of the at least two contacts participating in the ongoing instant messaging conversation and the interrupting conversation having a higher interrupt priority ranking compared to the interrupt priority ranking of the ongoing instant messaging conversation.

2. (Previously Presented) The computer implemented method of claim 1, further comprising selecting a precedence between interrupting the instant messaging conversation based on the interrupt priority ranking of the interrupting contact relative to the interrupt priority ranking of each of the at least two contacts and the interrupt priority ranking of the interrupting conversation relative to the interrupt priority ranking of the instant messaging conversation.

3. (Canceled)

4. (Canceled)

5. (Previously Presented) The computer implemented method of claim 1, further comprising sending a contact busy message to the interrupting contact in response to at least one of the interrupt priority ranking of the interrupting contact being no higher than the interrupt priority ranking of each of the at least two contacts and the interrupt priority ranking of the interrupting conversation being no higher than the interrupt priority ranking of the ongoing instant messaging conversation.

6. (Previously Presented) The computer implemented method of claim 1, further comprising:
presenting a graphical user interface (GUI) representation of the interrupting conversation in a foreground of a display in response to interrupting the instant messaging conversation; and
transferring a keyboard focus to a type-in box of the interrupting conversation in response to interrupting the instant messaging conversation.

7. (Previously Presented) The computer implemented method of claim 1, further comprising presenting a graphical user interface (GUI) representation of the instant messaging conversation in a background of a display in response to interrupting the instant messaging conversation.

8. (Previously Presented) The computer implemented method of claim 1, further comprising sending an interrupt notification to any of the at least two contacts of the instant messaging conversation not contacted by the interrupting contact in response to interrupting the instant messaging conversation.

9. (Previously Presented) The computer implemented method of claim 1, further comprising resuming the instant messaging conversation in response to the interrupting conversation being completed.

10. (Previously Presented) The computer implemented method of claim 1, further comprising setting an instant messaging conversation priority.
11. (Previously Presented) The computer implemented method of claim 1, further comprising selectively blocking interrupts.
12. (Previously Presented) The computer implemented method of claim 11, further comprising overriding an interrupts block.
13. (Previously Presented) The computer implemented method of claim 1, further comprising assigning an interrupt priority ranking to all contacts in an instant messaging contacts list in a user's communications device.
14. (Previously Presented) The computer implemented method of claim 13, wherein assigning an interrupt priority ranking comprises one of assigning the interrupt priority ranking by placing all contacts in a predetermined order in the contact list or auxiliary contact list on the user's communications device and by assigning a contact priority number to each contact in the contact list.
15. (Previously Presented) The computer implemented method of claim 1, further comprising deriving an interrupt priority ranking for each contact from a Lightweight Directory Access Protocol (LDAP) or from a reporting chain.
16. (Previously Presented) A computer implemented method for managing interrupts in an instant messaging application, comprising:
 - receiving an interrupt request from an interrupting contact during an ongoing instant messaging conversation between at least two contacts each using a communications device, wherein the interrupt request is received by the communications device of at least one of the at least two contacts;
 - interrupting the instant messaging conversation based on a set of interrupt rules and independent of a location of the communications device being used by each of the at least two

contacts, wherein interrupting the instant messaging conversation based on the set of interrupt rules comprises:

permitting the ongoing instant messaging conversation to be interrupted in response to interrupts being selectively permitted; and

determining that the interrupting conversation has an interrupt priority ranking higher than an interrupt priority ranking of the ongoing conversation set by at least one of the at least two contacts participating in the ongoing instant messaging conversation in their communications device; and

sending an interrupt blocked message to the interrupting contact in response to interrupts being selectively blocked.

17.-19. (Canceled)

20. (Previously Presented) The computer implemented method of claim 16, further comprising presenting a GUI representation of the interrupting conversation in a foreground of a display in response to interrupting the instant messaging conversation.

21. (Previously Presented) The computer implemented method of claim 16, further comprising sending an interrupt notification to any of the at least two contacts of the instant messaging conversation not contacted by the interrupting contact in response to interrupting the instant messaging conversation.

22.-39. (Canceled)

40. (Previously Presented) A computer implemented method for managing interrupts in an instant messaging application, comprising:

receiving an interrupt request from an interrupting contact or user during an ongoing instant messaging conversation between at least two contacts or users each using a communications device, wherein the interrupt request is received by the communications device of at least one of the at least two contacts;

determining whether the interrupting contact or user has an interrupt priority ranking in a contacts list of the communications device receiving the interrupt request that is higher than, or at least as high as, a priority ranking of each of the at least two contacts or users in the contacts list participating in the ongoing instant messaging conversation set by at least one of the at least two contacts participating in the ongoing instant messaging conversation in their communications device; and

interrupting the ongoing instant messaging conversation in response to the interrupt priority ranking of the interrupting contact or user being higher than, or at least as high as, each of the at least two contacts or users.

41. (Previously Presented) The computer implemented method of claim 40, further comprising dividing the contacts list into a primary contacts list and a normal contacts list, wherein the primary contacts list permits a user to specify the interrupt priority ranking for selected contacts by listing contacts in an order according to their respective interrupt priority order and wherein the normal contacts lists contacts alphabetically.

42. (Previously Presented) The computer implemented method of claim 41, further comprising blocking the contacts on the normal contacts list and that are not on the primary contacts list from interrupting the ongoing instant messaging conversation.

43. (Previously Presented) The computer implemented method of claim 40, further comprising indicating in the contacts list when a contact is online and available to enter into a new instant messaging conversation.

44. (Previously Presented) The computer implemented method of claim 40, further comprising representing the contacts list as a graphical user interface including a table comprising one column for indicating an online status of each contact in the contacts lists and another column for an interrupt priority ranking of each contact.

45. (Previously Presented) The computer implemented method of claim 44, further comprising assigning a numerical value to each contact that specifies the interrupt priority ranking of each contact.

46. (Previously Presented) The computer implemented method of claim 40, further comprising presenting a graphical user interface to each participant in an active instant messaging conversation, wherein the graphical user interface comprises an input means to enter or select a priority of the active instant messaging conversation.

47. (Previously Presented) A system for managing interrupts in an instant messaging application, comprising:

a communications device for receiving an interrupt from an interrupting contact during an instant messaging conversation between a contact using the communications device and at least one other contact using another communications device;

a module stored in a memory of the communications device and operable on the communications device to determine at least one of whether the interrupting contact has an interrupt priority ranking associated with the interrupting contact in a contacts list of the communications device receiving the interrupt request that is higher than, or at least as high as, an interrupt priority ranking of each of the at least two contacts participating in the ongoing instant messaging conversation and whether an interrupting conversation has a higher priority compared to a priority ranking of the ongoing instant messaging conversation set by at least one of the at least two contacts participating in the ongoing instant messaging conversation; and

another module stored in the memory of the communications device and operable on the communications device to interrupt the ongoing instant messaging conversation in response to a predetermined one of the interrupt priority ranking of the interrupting contact being higher than, or at least as high as, the interrupt priority ranking of each of the at least two contacts participating in the ongoing instant messaging conversation and the interrupting conversation having a higher interrupt priority ranking compared to the interrupt priority ranking of the ongoing instant messaging conversation.

48. (Previously Presented) The system of claim 47, further comprising a set of interrupt rules, wherein the set of interrupt rules comprise a rule permitting the instant messaging conversation to be interrupted in response to interrupts being selectively permitted and the interrupting contact having an interrupt priority ranking at least as high as an interrupt priority ranking of each of the contacts and independent of the location of the communications devices being used by each of contacts.

49. (Previously Presented) The system of claim 47, further comprising a set of interrupt rules, wherein the set of interrupt rules comprises a rule permitting the instant messaging conversation to be interrupted in response to interrupts being selectively permitted and the interrupting conversation having a higher interrupt priority ranking than an interrupt priority ranking of the instant messaging conversation and independent of the location of a communications device being used by each of the contacts.

50. (Previously Presented) The system of claim 47, further comprising a set of interrupt rules, wherein the set of interrupt rules comprises a rule permitting interruption of the instant messaging conversation in response to a predetermined one of, one of the interrupting contact having a selected interrupt priority ranking at least as high as a interrupt priority ranking of each of the contacts, or the interrupting conversation having an interrupt priority ranking at least as high as an interrupt priority ranking of the instant messaging conversation.

51. (Previously Presented) The system of claim 47, further comprising means for presenting a GUI to a user to set a conversation priority.

52. (Previously Presented) A computer readable storage medium having computer usable program code embodied therewith for managing interrupts in an instant messaging application, the computer readable storage medium comprising:

computer usable program code configured to receive an interrupt request from an interrupting contact or user during an ongoing instant messaging conversation between at least two contacts or users;

computer usable program code configured to determine at least one of whether the interrupting contact has an interrupt priority ranking associated with the interrupting contact in a contacts list of the communications device receiving the interrupt request that is higher than, or at least as high as, an interrupt priority ranking of each of the at least two contacts participating in the ongoing instant messaging conversation and whether an interrupting conversation has a higher priority compared to a priority of the ongoing instant messaging conversation set by at least one of the at least two contacts participating in the ongoing instant messaging conversation; and

computer usable program code configured to interrupt the ongoing instant messaging conversation in response to a predetermined one of the interrupt priority ranking of the interrupting contact being higher than, or at least as high as, the interrupt priority ranking of each of the at least two contacts participating in the ongoing instant messaging conversation and the interrupting conversation having a higher interrupt priority ranking compared to the interrupt priority ranking of the ongoing instant messaging conversation.

53. (Previously Presented) The computer readable storage medium of claim 52, further comprising computer usable program code configured to send a contact busy message to the interrupting contact in response to one of the interrupting contact having an interrupt priority ranking no higher than each of the at least two contacts or the interrupting conversation having an interrupt priority ranking no higher than the interrupt priority ranking of the instant messaging conversation.

54. (Previously Presented) The computer readable storage medium of claim 52, further comprising:

computer usable program code configured to present a graphical user interface (GUI) representation of the interrupting conversation in a foreground of a display in response to interrupting the instant messaging conversation; and

computer usable program code configured to transfer a keyboard focus to a type-in box of the interrupting conversation in response to interrupting the instant messaging conversation.

55. (Previously Presented) The computer readable storage medium of claim 52, further comprising computer usable program code configured to send an interrupt notification to any of the at least two contacts of the instant messaging conversation not contacted by the interrupting contact in response to interrupting the instant messaging conversation.

56. (Previously Presented) The computer readable storage medium of claim 52, further comprising computer usable program code configured to presenting a GUI to a user to set an instant messaging conversation priority.

IX. Evidence Appendix

None.

X. Related Proceedings Appendix

None.